REMARKS

Claims 1-35 were previously pending in the application. Claims 1-15 are cancelled, leaving claims 16-35 for consideration.

The Official Action objects to claim 29 and requests further clarification because of perceived inconsistencies between claim 29 and claim 28. Withdrawal of the objection is respectfully requested for the reasons set forth below.

Claim 28, from which claim 29 depends, provides an attachment member attached to the circuit board. As seen in Figure 5 of the present invention, attachment member 16 is attached to circuit board 13 (two separate elements).

Claim 29 provides that the attachment member is a flexible printed circuit. Page 20, lines 18-20 disclose that VR 15 is joined by a flexible printed circuit 16 to the signal processing circuit board 13. Accordingly, flexible printed circuit 16 is a specific attachment member attached to the circuit board 13, and thus claim 29 also provides two separate elements. Therefore, there does not appear to be any inconsistency between claims 28 and 29.

Claims 16-27 are rejected as being unpatentable over MIYAJIMA et al. 4,652,932 in view of DOI JP 3-116898.

Reconsideration and withdrawal of the rejection are respectfully requested because the references do not disclose or

suggest: 1) providing a board used for a liquid crystal display screen fixedly attached to the liquid crystal display screen and having a hole in the board; 2) displaying an image on the liquid crystal display screen; and 3) operating an operating member through the hole from a side opposite said liquid crystal display screen while viewing the image as recited in claim 16 of the present application.

By way of example, Figure 5 of the present application shows a circuit board 13 fixedly attached to liquid crystal panel 11 through back light module 24. As disclosed on page 20, lines 12-24, a variable resistor (VR) 15 is mounted to a components mounting side (opposite side to the liquid crystal panel) of the signal processing circuit board 13 with its control knob 15a exposed. Page 28, lines 2-10 further disclose that the control knob 15a (operating member) can be adjusted by inserting a screw driver through VR adjusting opening 31 while observing the display on the liquid crystal module 17.

Accordingly, the liquid crystal module of the present invention has a front side having liquid crystal panel 11 and a back side having circuit board 13. The circuit board 13 has a hole 31 therethrough and a control knob 15a in the hole for adjusting the display on the liquid crystal panel 11 from a side opposite the display panel.

As seen in Figure 3 of MIYAJIMA et al., for example, the liquid crystal panel 66 is rotatably attached at shaft 26 to lower shell 14. As further seen in Figures 1(b) and 3, the board 102 (104) that contains variable resistor 118 is connected to lower shell 14 and is beneath mirror 97. Accordingly, the display 94 (66) rotates with respect to circuit board 102 (104) and is not fixedly attached to the liquid crystal display screen as recited in claim 16 of the present application.

The underlined paragraph on page 4 of the Official Action relates to flexible circuit board 92. Circuit board 92 neither has a variable electronic element mounted thereto nor a hole formed therein as further required in claim 16. The Official Action cannot pick and choose attributes from circuit board (104) and combine these attributes with another circuit board (92) and assert that the combination reads on the single recited circuit board of the present application.

In addition, one of ordinary skill in the art would use a flexible circuit board when flexibility is required and would not fixedly attach the same to a liquid crystal display screen.

Further, the discussion of "product-by-process" as regards to claim 16 on page 4 of the Official Action is not understood. Claim 16 is a method claim, not an apparatus (product) claim. Further clarification is respectfully requested.

The Official Action states that MIYAJIMA et al. do not explicitly go into any great details of the mounting of the variable electronic element and that it would be obvious to modify the variable electronic element of MIYAJIMA et al. with the teachings of DOI to render obvious the claims of the present application.

DOI is cited for the teaching of operating the operating member through a hole. Applicant is unable to determine where the hole would be placed in MIYAJIMA et al. such that the combination would be obvious. Further clarification is respectfully requested.

Specifically, the variable electronic element 118 of MIYAJIMA et al. is on board 102 (104) which is beneath mirror 97 as seen in Figure 3 of MIYAJIMA et al. There does not appear to be any accessible part of board 104 in which a hole could be formed to place the operating member therein, especially since the operating member must point to the side opposite the liquid crystal display panel as recited in claim 16.

The Official Action asserts that since both references teach electronic elements, it would be obvious to combine the references to render obvious the present claims.

MPEP §2143.01 states that the mere fact that references can be combined or modified does not render the resulting combination obvious unless the prior art also suggests the

desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Applicant submits herewith a color-coded drawing of Figure 3 of MIYAJIMA et al. to clarify applicant's position that the proposed combination is undesirable and/or inoperable. Specifically, as seen in orange, the primary circuit block 102 having circuit board 104 (which in turn contains variable resistor 118 - Figure 5(a)) is beneath mirror 97 (green) such that there is no access to any potentiometer (or other control member) that may be placed on the underside or top side of circuit board 104. Accordingly as seen in Figures 2(a) and 2(d) of MIYAJIMA et al., the controls 48, 50, 52, 54, 56 must be placed at the side of the device and could not be mounted in a mounting side of the board. Therefore, clarification of where a hole would be placed in MIYAJIMA et al. (as taught by DOI) so that the operating member can be operated is respectfully requested.

In addition, as seen by comparing Figures 1(a) and 1(b) of MIYAJIMA et al., everything above the lower shield 94 (red in color-coded Figure 3) rotates with respect to the circuit board 104, such that the board is not fixedly attached to the liquid crystal display screen. As set forth above, flexible circuit board 92 is different than the circuit board having the variable

resistor. Therefore, the limitation that the board is fixedly attached to the liquid crystal display screen is not met.

Accordingly, *prima facie* obviousness has not been established and reconsideration and withdrawal of the rejection as to claim 16 are respectfully requested.

The dependent claims also include features not disclosed in the combination of references. For example, claim 18 recites that the variable electronic element is mounted through a flexible printed circuit. As seen in Figure 6B of the present application, flexible printed circuit 16 is used to mount variable electronic element 15. Claim 20 recites that the variable electronic element is floated on the flexible printed circuit. As seen in Figure 6B of the present application, variable electronic element 15 is not rigidly attached to a rigid element but is attached to the flexible printed circuit such that the variable electronic element appears to float on the flexible printed circuit. Claim 22 recites that the variable electronic element overlaps a liquid crystal display screen as shown in Figure 5 of the present application. None of these features are disclosed in the references and thus these claims are believed patentable regardless of the patentability of the claims from which they depend.

Claim 23 also recites a signal processing circuit board and a liquid crystal display screen electronically and fixedly

connected to the signal processing circuit board. The comments regarding claim 16 are equally applicable to claim 23.

In addition, claim 23 recites that the variable electronic element is provided in an opposed side opposed to the displaying side of the liquid crystal display screen such that the operating member is exposed in the opposed side through the hole. As seen in Figure 5 of the present application, the opposed side is opposite to the front side of liquid crystal panel 11 (the displaying side) and the operating member 15a is exposed in the opposed side through the hole 31.

Modifying MIYAJIMA et al. as suggested in the Official Action would place a variable controller in the space between the circuit board 104 and the mirror 97A (indicated in blue in the color-coded drawing), requiring the user to insert a screw driver or the like through lower shell 14 and whatever other components that are held within shell 14.

The user attempting to adjust the display of MIYAJIMA et al. would find it very difficult to balance the device and turn the screwdriver (to adjust the variable controller) while still viewing the display. Specifically, the operator would not be able to place the device of MIYAJIMA et al. in one hand and operate the device (including adjusting the display) with the other hand as required (see column 8, lines 45-60 of MIYAJIMA et al.).

MPEP §2143.01 states that if a proposed modification or a combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The device of MIYAJIMA et al. is designed to be a portable television set that is easily operated by the controls 48, 50, 52, 54 and 56 on one side of the device. Having a variable control element as suggested in the Official Action would necessarily place the variable control element underneath the device (out of easy access to the user) in order to meet the recited structural location of the device as recited in claim 23.

Accordingly, such modification would change the principle of operation of MIYAJIMA et al. and in fact would make the device of MIYAJIMA et al. harder to operate (not easier as suggested in the Official Action) and thus the teachings offered in the Official Action are not sufficient to render the claims *prima facie* obvious. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Claim 28 recites that an attachment member is fixedly attached only to the board at only the first side of the board and that a variable electronic element is connected to the attachment member and has an operating member that is accessible

through the hole from a second side of the board. New claims 29-32 show the specific attachment member as seen in Figures 6-10 of the present application.

By way of further explanation, an object of the present invention is to use a variable electronic element that is not limited to one particular location. Specifically, as seen in Figure 5 of the present application, a gap 40 exists between circuit board 13 and liquid crystal panel 11. The variable electronic element 15 can be placed anywhere along this opening 40 because it is suspended from the circuit board 13 using the attachment device 16, 33 or 35 shown in Figures 6-10 of the present application.

MIYAJIMA et al. do not disclose the details of the attachment of the variable electronic element and the processing board. Figure 1 of DOI shows that attachment member 12 is connected at 15 to board 13 and is also attached to members 4 and 5. Accordingly, the attachment member of DOI is not fixedly attached only to the board and only at the first side of the board as recited in claim 28 of the present application. Claims 29-35 depend from claim 28 and further define the invention and are also believed patentable over the cited prior art.

In addition, claim 35 recites that the operating member is substantially flush with the second side as disclosed on page 26, lines 10-12 of the present application and as seen in Figure

6B, for example. The above-noted features are not disclosed by the references.

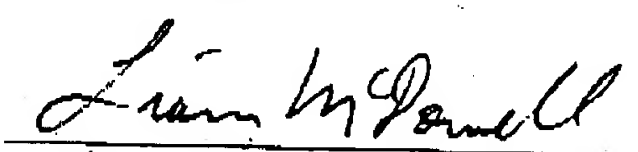
In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Based on the telephone conversations with Examiner Akkapeddi on February 3 and 4, 2004, it is believed that the above amendment does place the application in condition for allowance. Reconsideration and allowance are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



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